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## **CLAIMS**

- 1. Process for the processing of data regarding the three-dimensional shape of a dental prosthesis, which has two prosthesis sections and a connector section, said connector section being connected to the two prosthesis sections and less stable than the two prosthesis sections, said process comprising the steps that:
- a stability parameter and a stability criterion are determined for the connector section;
- for the stability parameter, the actual value is calculated from the
  data;
  - it is checked for the connector section as to whether the actual value fulfills the stability criterion, and if not, that a warning signal is generated,

wherein the determination of the stability criterion is dependent on at least one of the following prosthesis attributes:

the configuration of the prosthesis; and/or

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- the position of the prosthesis inside the mouth; and/or
- the material and/or the cross-sectional profile of the connector section; and/or
- 20 the type of the prosthesis sections adjoining the connector section.
  - 2. Process according to one of the preceding claims, in which the stability criterion includes a limit to which the actual value is compared.
  - 3. Process according to one of the preceding claims, in which the minimal cross-sectional area of the connector section is one stability parameter and the stability criterion comprises a lower limit for it.
  - 4. Process according to one of the preceding claims, in which the length of the connector section is one stability parameter and the stability criterion comprises an upper limit for it.

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- 5. Process according to one of the preceding claims, in which the minimal section modulus of the connector section is one stability parameter and the stability criterion comprises a lower limit for it.
- 6. Process according to one of the preceding claims, in which the stability parameter is determined by means of the finite elements method and/or the boundary element method.
  - 7. Process according to one of the preceding claims, in which the calculation of the actual value is started conforming to a given specification.
- 8. Process according to one of the preceding claims, in which the calculation of the actual value is started according to a given time plan.
  - 9. Process according to one of the preceding claims, in which the shape data can be modified and the calculation of the actual value is started as soon as the data have or were modified.
- 10. Process according to one of the preceding claims, in which the warning signal triggers a warning for the user and/or the step that the change of the shape data which has lead to the non-fulfillment of the stability criterion, is reversed.
  - 11. Process according to one of the preceding claims, which is performed by means of a computer program.
- 20 12. Data processing device for performing the process according to one of the preceding claims, with:
  - an input device for the data;
  - a central unit connected to the input device, in which a program runs for the processing of the data according to the process;
- an output device for the warning signal, connected to the central unit.

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- 13. Data processing device according to one of the preceding claims, in which an input device for changing the data and an output device for displaying the data are connected to the central unit.
- 14. Computer program which is adapted to perform the process according to one of the preceding claims.
  - 15. Computer program which, when it is run in a computer, performs the process according to one of the preceding claims.
  - 16. Computer program comprising commands that perform the process according to one of the preceding claims.
- 17. Computer program which implements the process according to one of the preceding claims.
  - 18. Data carrier on which a computer program according to one of the preceding claims is stored.